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A FEW RECORDS
OF FISHES IN DELAWARE 1924

Mr. J. F. Carpenter sent the following notes relative to trips during July and August to Ship John Light in Delaware Bay. Mr. W. J. Fox gave me a few notes on Bower's Beach for July 4 and September 26.

1. Sand Shark (*Carcharias taurus*). Bower's Beach, 1 of 8 feet July 4 and 1 of 2 feet September 28.
2. Hammer-head Shark (*Sphyrna zygaena*). Ship John Light, 6 small ones.
3. Smooth Dog Shark (*Mustelus canis*). Few at Ship John Light, 1 September 26; Bower's Beach, September 26.
4. Bob-tailed Skate (*Raja eglanteria*). Bower's Beach, 1 September 29.
5. Eel (*Muraena rostrata*). Ship John Light, few; in Murderkill tidal in September.
6. Green Gar (*Strongylura marina*). Few at Ship John Light.
7. Summer Flounder (*Paralichthys dentatus*). Ship John Light, 5 September 26.
8. Blue Fish (*Pomatomus saltatrix*). Bower's Beach, 1 August 16.

9. White Perch (*Morone americana*). Bower's Beach, 1.
10. Black Sea Bass (*Centropristis striatus*). Below Ship John Light, 5 or 6 of about 10 inches.
11. Weak Fish (*Cynoscion regalis*). Ship John Light run 10 to 12 lbs., average 1 to 5 lbs., 7 caught September 26; Bower's Beach, common.
12. Silver Perch (*Bairdiella chrysura*). Ship John Light, 6.
13. Red Drum (*Sciaenops ocellatus*). Ship John Light, 2.
14. Goody (*Leiostomus xanthurus*). Ship John Light, dozen during the season.
15. Croaker (*Micropogon undulatus*). Ship John Light, abundant, 84 on September 26; Bower's Beach, 1 July 4.
16. King Fish (*Menticirrhus saxatilis*). Ship John Light, 2 September 26.
17. Good Fish (*Opsanus tau*). Ship John Light, rather plentiful in summer, common in September 26.
18. Puffer (*Sphoeroides maculatus*). Ship John Light, common.

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RECORDS OF FISHES IN NEW JERSEY 1924

The following items were kindly supplied chiefly by Mr. R. Dale Benson, chiefly from his observations at Ventnor and vicinity and various lifts of the net on Young's Pier at Atlantic City. Mr. J. F. Carpenter also sent a few records for Avalon on August 3 and Townsend's Inlet on September 27.

1. Sand Shark (*Carcharias taurus*). Ventnor Pier and all along the beach; Great Egg Harbor Bay.
2. Milbert's Shark (*Eulamia plumbea*). At Ventnor Pier 10 of 1 to 3 feet in length.

3. Hammer-head Shark (*Sphyrna zygaena*). Ventnor Pier 4. One at Cape May, reported by Dr. Witmer Stone.
4. Smooth Dog Shark (*Mustelus canis*). Young's Pier, Ventnor, Longport, numerous.
5. Spiny Dog Shark (*Squalus acanthias*). October 29 at Ventnor; 12 November 1 at Young's Pier.
6. Bob-tailed Skate (*Raja eglanteria*). Ventnor, Longport, Young's Pier, common everywhere.
7. Say's Sting-ray (*Dasyatis say*). Ventnor, Young's Pier and Longport bridge, largest 30 lbs.
8. Cow-nosed Ray (*Rhinoptera bonasus*). Two at Ventnor.
9. Sturgeon (*Acipenser sturio*). Three medium examples at Young's Pier in August.
10. Tarpon (*Megalops atlanticus*). One of 3 feet in length at Young's Pier in July.
11. Herring (*Clupea harengus*). Young's Pier, few through summer.
12. Fall Herring (*Pomolobus mediocris*). Ten at Longport in October.
13. Menhaden (*Brevoortia tyrannus*). Common at Young's Pier.
14. Eel (*Muraena rostrata*). Common in beach thoroughfares and at Young's Pier.
15. Conger Eel (*Conger conger*). Young's Pier.
16. Green Gar (*Strongylura marina*). Longport bridge, chasing shiners.
17. Tom-cod (*Microgathus tomcod*). Several in late October and through November at Young's Pier.
18. Spotted Codling (*Phycis regius*). Several in October at Ventnor and Young's Pier.
19. Window Pane (*Lophopsetta maculata*). Young's Pier.
20. Summer Flounder (*Paralichthys dentatus*). Longport, Ventnor and Young's Pier, very scarce; Avalon and Townsend's Inlet.

21. Winter Flounder (*Pseudopleuronectes americanus*). Caught all summer at Young's Pier; 1 at Longport Bridge in late October.
22. Sole (*Achirus fasciatus*). Young's Pier.
23. Sea Horse (*Hippocampus hudsonius*). Young's Pier, 3 in September.
24. Silversides (*Menidia menidia notata*). Common in September and October at Ventnor.
25. White Mullet (*Mugil curema*). Ventnor, Longport, New Inlet, Beach Haven, common.
26. Mackerel (*Scomber scombrus*). Few at Young's Pier; 4 or 5 at Beach Haven.
27. Tunny (*Thunnus thynnus*). In 1 day 14 taken 25 miles off Barnegat, and shoals off the banks.
28. Cutlass Fish (*Trichiurus lepturus*). Mr. Philip Laurent reports 1 captured at Young's Pier, little over 2 feet in length, September 4.
29. Amber Fish (*Seriola zonata*). August 25 one at Ventnor on line; frequent to 14 lbs. off Barnegat.
30. Crevalle (*Caranx hippos*). One at Young's Pier October 31.
31. Moon Fish (*Selene vomer*). About dozen at Young's Pier, of these 1 late as November 2.
32. Pampano (*Trachinotus carolinus*). Number of young in beach pools at Ventnor; 1 on line of 2 lbs. at Absecon.
33. Blue Fish (*Pomatomus saltatrix*). One of 8 lbs. and 1 of 6 lbs. at Little Beach; very few tailors.
34. Striped Bass (*Roccus lineatus*). In surf 20 taken from Longport to Ventnor, largest of 20 lbs. 1 oz off Longport.
35. Black Sea Bass (*Centropristis striatus*). Small ones very plentiful in back channels at Ventnor, 65 taken in 1 afternoon; Longport and Young's Pier; common at Beach Haven.
36. Pig Fish (*Orthopristis chrysopterus*). Young's Pier.
37. Porgy (*Stenotomus chrysops*). Young's Pier; back channel at Ventnor.

38. Weak Fish (*Cynoscion regalis*). Several large ones 7 to 9 lbs. at Ventnor on squid, mullet and shedder-crab; Young's Pier; few at Beach Haven.
39. Spotted Weak Fish (*Cynoscion nebulosus*). Young's Pier, 2 in summer.
40. Silver Perch (*Bairdiella chrysura*). Longport, Ventnor, Young's Pier, few.
41. Red Drum (*Sciaenops ocellatus*). Long porton sod banks.
42. Goody (*Leiostomus xanthurus*). Very scarce at Young's Pier and Ventnor on the coast.
43. Croaker (*Micropogon undulatus*). Ventnor, Longport, Young's Pier, Absecon, Avalon, leaving September 1.
44. King Fish (*Menticirrhus saxatilis*). Longport, Ventnor and Young's Pier, not plentiful.
45. Black Dumi (*Pogonias cromis*). Young's Pier.
46. Spade Fish (*Chaetodipterus faber*). Young's Pier, 2 or 3 in summer.
47. Long-spined Sculpin (*Myoxocephalus octodecimspinosus*). Young's Pier, 8 on November 1.
48. Sea Raven (*Hemitripterus americanus*). Young's Pier.
49. Lump Fish (*Cyclopterus lumpus*). Young's Pier, 1 on November 3.
50. Long-finned Gurnard (*Prionotus evolans strigatus*). Several at Young's Pier and in back channels at Ventnor; 1 at Beach Haven.
51. Tautog (*Tautoga onitis*). Avalon; Ventnor and Young's Pier, inside channels and numerous at the jetties.
52. Slender Remora (*Leptecheneis naucratis*). Ventnor Pier, 5 caught on lines from June 1 to July 11.
53. Sand Lance (*Ammodytes americanus*). Ventnor beach, 1 July 11, numerous in surf after September 20.
54. Star Gazer (*Astroscopus guttatus*). Young's Pier.
55. Toad Fish (*Opsanus tau*). Very abundant inside Ventnor and Longport.

56. Trigger-fish (*Balistes carolinensis*). Young's Pier, 10 in summer.

57. File-fish (*Monacanthus hispidus*). Small one in August at Longport bridge.

58. Orange File-fish (*Alutera schoepfii*). One 12 inches long from about 3 to 4 miles from Absecon Inlet.

59. Puffer (*Sphoeroides maculatus*). Common at Longport, Ventnor and Young's Pier.

60. Burr Fish (*Chilomycterus schoepfii*). Common at Ventnor and Young's Pier.

61. Angler (*Lophius piscatorius*). Ventnor, 3 during summer.

A KEY TO NORTH AMERICAN SNAKES *

The appearance of Blanchard's key to the snakes of North America is timely, following, as it does, the publication of Stejneger and Barbour's "A Check List of North American Amphibians and Reptiles." Since the last comprehensive keys were published, the additions to our knowledge of North American reptiles and amphibians and the changes in nomenclature have been numerous, and identification of material has become increasingly difficult for the teacher and the student who has not closely followed the literature.

One can have nothing but praise for this work. It is to be noted that the key has not been compiled with pastepot and scissors, but is largely original. While for certain genera the key has been adapted from those of other authors, the greater portion "is based almost exclusively upon the writer's personal examinations of specimens in various museums." Two other features deserve particular mention: whenever desirable, several characters are used, and many of the characters are

* A key to the Snakes of the United States, Canada, and Lower California. By Frank N. Blanchard. Papers of the Michigan Academy of Sciences, Arts, and Letters, Vol. IV, Pt. 11, 1924, pp. XIII-65, 78 figures. Published by the University of Michigan.

illustrated by excellent line drawings. In short, the key is a very usable and dependable one, even for the person who is not a herpetologist.

Blanchard has used the second edition of the check list as a basis, but he has not hesitated to give expression to his own opinions by admitting forms not recognized by Stejneger and Barbour, and by reducing some accepted names to synonymy. For example, he reduces the species of *Chilomeniscus* from four to three and those of *Hypsiglena* from two to one; he recognizes three subspecies in the genus *Carphophis* instead of two species, and two subspecies rather than two species in Virginia; he rejects the genus *Amphiardis* and accepts Ortenburger's proposal to separate the genus *Masticophis* from *Coluber*. By expressing his own views on classification, the author has made it evident that his object has been to provide a key to the snakes of North America, not simply to facilitate the identification of the forms named in the check-list.

Herpetologists are indebted to Dr. Blanchard for a valuable tool; and teachers and students who do not have access to the literature will find his book practically indispensable.

ALEXANDER G. RUTHVEN

EDITORIAL NOTE

It may be of use to readers of *Copeia* to list the changes which the Key makes in the Check List, especially as these changes are not fully stated in the Key.

FORMS ADDED

Carphophis amoena helenae (Kennicott)
Diadophis amabilis modestus (Duméril and Bocourt)
Masticophis flagellum frenatus (Stejneger)

Masticophis flagellum flavigularis (Hallowell)
Arizona elegans occidentalis Blanchard
Pituophis lodingi Blanchard
Natrix sipedon erythrogaster (Forster)

FORMS OMITTED

Diadophis anthonyi Van Denburgh and Slevin
Elaphe obsoleta lindheimeri (Baird and Girard)
Lampropeltis agalma Van Denburgh and Slevin
Lampropeltis herrerae Van Denburgh and Slevin
Hypsiglena ochrorhynchus texana (Stejneger)
Chilomeniscus ephippicus Cope
Amphiardis inornatus (Garman)
Thamnophis ordinoides biscutatus (Cope)
Crotalus atrox elegans Schmidt
Crotalus goldmani Schmidt

